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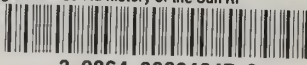
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SAGA OF THE SUN
A History of the Sun River Elk Herd

by
Harold D. Picton
and
Irene E. Picton

Game Management Division
MONTANA DEPARTMENT OF FISH AND GAME



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- The pronghorn antelope - its range use and food habits in Central Montana with
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- Merriam's Turkeys in Southeastern Montana, Robert Jonas, 1966.
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- Forest grouse and experimental spruce budworm insecticide studies, Thomas W.
Mussehl and Phillip Schladweiler, 1969.
- People and the Gallatin elk herd, Allan L. Lovaas, 1970.
- Game Management in Montana, edited by Thomas W. Mussehl and F.W. Howell,
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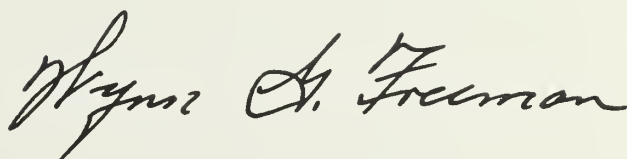


FOREWORD

The story of Sun River elk is still unfolding. It started when the forces of nature produced a unique and scenic wildlife habitat. Elk have shared this land with other animals from the beginning.

Things were simple at first until people settled in the Sun River country and began to influence what happened. As time went on, the course of events became complex with the interacting forces of man and nature.

This publication is a historical record of the Sun River elk herd and its management. It is dedicated to the common goal that all people had throughout the years—that this elk herd would be perpetuated for future generations to enjoy in the spectacular setting of Montana's Sun River.

A handwritten signature in cursive script that reads "Wynn G. Freeman". The signature is written in dark ink and is positioned above the printed name.

Wynn G. Freeman, Administrator
Game Management Division



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INTRODUCTION

From our perch high on the eastern battlements of the Rocky Mountains we can see the silvery thread of the river stretching across the plains toward the rising sun. Sixty-five miles away the stream joins with the currents of the Missouri just before the tumultuous plunge over the Great Falls. The mountain front stretches away to the north, where Glacier National Park lies, 50 miles distant. To the west, the river traces its winding course for 40 miles through the rugged ridges and broad valleys formed by the famous Lewis Overthrust.^{1*} This land has seen the hopes, the fears, the love and the laughter of generations of men. Each of these generations have had their own names for the river, the Pile of Rocks River,² the Medicine and now the Sun. The plains and mountains are ancient but our story is new, for the years encompassed by these chapters represent the beginning of the written history of this land. Exploration and adventure, emotion and politics, science and history are all welded together, here, by the river, the mountains and the plains.

The recorded history of the Sun River of Montana began on June 14, 1805 when Captain Lewis ascended a hill and wrote,³ "Along this wide level country the Missouri pursued its winding course, filled with water to its even and grassy banks, while, about four miles above it was joined by a large (Medicine or Sun) river, flowing from the northwest through a valley three miles in width, and distinguished by the timber which adorned its shores."

Unfortunately this day was not entirely tranquil for Captain Lewis. He later shot a buffalo and neglected to reload his rifle. While watching the buffalo, a grizzly stalked to within 20 yards of him. Captain Lewis outran the bear to the river and the bear departed. After this stimulating interlude Captain Lewis continued his exploration of the mouth of the Sun River. "He now resumed his progress in the direction which the bear had taken, toward the western" (Sun) "river, and found it a handsome stream about 200 yards wide, apparently deep, with a gentle current; its water clear, and its banks, which were formed principally of dark brown and blue clay, about the same height as those of the Missouri—that is, from three to five feet. What is singular is, that the river does not seem to overflow its banks at any season,

*All numbered references are found in numerical order beginning on page 47.

while it might be presumed from its vicinity to the mountains, that the torrents arising from the melting of the snows would sometimes cause it to swell beyond its limits. The contrary fact would induce a belief that the Rocky Mountains yield their snows very reluctantly, and equally to the sun, and are not often drenched by very heavy rains. This river is no doubt that which the Indians call Medicine River which they mentioned as emptying into the Missouri just above the falls."

Captain Lewis and his party, on their return trip from the Pacific Coast, became the first to record a description of the middle portion of the Sun River from the Rocky Mountains eastward across the prairie. Their journals for July 8, 1806 read,² "But as our object was to strike Medicine" (Sun) "River, and hunt down to its mouth to procure skins for the food and gear necessary for the three men who are to be left at the falls, none of whom are hunters, we determined to leave the road. We, therefore, proceeded due north through an open plain, till we reached Shishequaw Creek" (now the South Fork or Elk Creek), "A stream about 20 yards wide, with a considerable quantity of timber in its low grounds. Here we halted and dined, and now felt, by the luxury of our food, that we were approaching once more the plains of the Missouri, so rich in game. We saw a great number of deer, antelope, wolves and some barking squirrels, and for the first time caught a distant prospect of two buffaloes. After dinner we followed the Shishequaw for 6½ miles" (past Augusta) "to its entrance into the Medicine River, and went along the banks of this river for eight miles, when we camped on a large island. The bottom continued low, level and extensive; the plains too are level; but the soil of neither is fertile, as it consists of a



Even today a healthy grizzly bear population still exists in the Sun River area.

—(F&G photo)

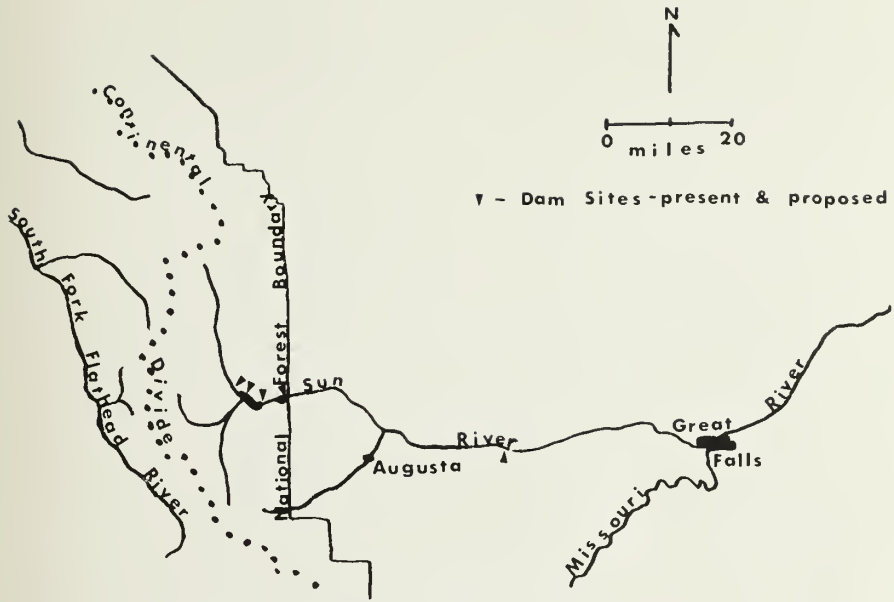


Figure 1. The Sun River drainage including the locations of existing and proposed dams.

light-colored earth, intermixed with a large portion of gravel; the grass in both is generally about nine inches high.”

It is of interest that elk were not reported in their travels from the Dearborn to the Sun River. Lewis and Clark⁴ also observed that although elk were sometimes seen in plains areas, rough timbered areas had the best elk populations east of the Continental Divide. While they were in the vicinity of the Great Falls of the Missouri, they were unable to kill enough elk for hides to cover a canoe. Their observation of clear water at the mouth of the Sun River contrasts with its present muddy current.

Lewis and Clark provided a written description which we can use as a starting point for our ecological history. Although the skilled observations of the two captains provide the first written record, man occupied the Sun River drainage long before Lewis and Clark.



EARLY HISTORY

From Mammoths to Buffalo

The mountain portion of the drainage housed a glacier during the last ice age and glacial deposits extend about 14 miles east of the mountain front.⁵ A number of fossils from mammoths indicate that these elephantine beasts were abundant in the area during the last ice age, which ended about 10,000 years ago. Paleontologists estimate that they may have been nearly as numerous as the buffalo were in the early 1800's. Permanent snow covered the mountains above 7000 feet⁶ and restricted the wildlife to the plains during this icy era. Elk fossils also testify to their long time use of the Sun River foothills.

The Sun River foothills long served as a thoroughfare for the migrations of man.⁷ A well used Indian trail followed the mountain front. Petroglyphs are found in the Sun River canyon. Other prehistoric hunting camps have been found near the head of Gibson Reservoir and near Nilan Reservoir.⁸ Artifacts indicate that Indians ranged into the mountains throughout the North Fork drainage.⁹

The Flathead-Salish-Kutenai group of tribes occupied the Sun River drainage about 1600 A.D. when they obtained horses for the first time.¹⁰ The Blackfeet seized the area about 1700-1750 and held it until the white man replaced them in the mid 1800's. The Sun River area was one of the Indians' favorite as the abundant medicine wheels and tipi rings in the area testify. The Indian era was already drawing to a close when an estimated 5000 Blackfeet fought an equal number of Crows in the lower Sun River valley about 1850.¹¹ Fortifications, burial sites and other signs of war gave testimony to this struggle, won by the Blackfeet. Colonel Vaughan¹² reported in 1858 that the Blackfoot nation extended from the Milk River to the mountains and south to the Sun River. This 32,000 square mile nation was occupied by 10,400 people with 9,900 horses. This heartland was also occupied by a major buffalo herd which furnished the 60-80 buffalo per day needed by the Blackfoot nation. Colonel Vaughan¹² noted that the buffalo had already begun to decline by 1858, which he attributed to the introduction of the iron arrowhead. Buffalo hide hunters, with the considerable help of the local Indians, shipped 36,000 buffalo robes from Fort Benton in 1857. This trade rose to 80,000 robes in 1876 and declined to none by 1884.^{13 14}



An ERTS earth satellite picture of the Sun River. The picture is oriented with west at the top. The South Fork of the Flathead River crosses the upper left corner. The barren and cliff areas of the Chinese Wall and Continental Divide are seen as one moves down from this corner. Next is the rugged and heavily timbered terrain of the Sun River Game Preserve bordered by the grasslands of the North Fork flats. The dark body left of center is Pishkin Reservoir. Freezeout Lake and Fairfield Bench are near the bottom of the picture. —(NASA photo)

The hunters and trappers who followed the footsteps of Lewis and Clark into the Sun River left little more to mark their passage than did the generations of Indians before them.

Explorers, Settlers and Cattle

The recorded exploration of the upper or mountainous portion of the Sun River drainage began with a journey by Mr. Doty of the Isaac Stevens railroad exploration party.¹⁵ On May 10, 1854, the Doty party¹⁶ followed the North Fork of the Sun River from the present site of Augusta through the foothills to the present site of Diversion Dam. Here the way was blocked by a 100 foot limestone wall. No attempt was made to penetrate beyond it into the canyon of the North Fork. The party proceeded north under Castle Reef to the Teton River. Herds of elk were reported in the foothills. Other portions of the Stevens party crossed the lower Sun River and reported numbers of deer, antelope, bighorns and an "almost inconceivable" number of buffalo.

Colonel A.J. Vaughan made the first attempt at farming in the Sun River valley in 1858.¹⁷ The crops grew well, but unfortunately beavers destroyed them. His requisition for beaver traps to the War Department in Washington, D.C. caused considerable consternation since the War Department knew with absolute certainty that beavers didn't ever eat crops.

Ranches were started in the valley areas in 1861 and 1869. The mountain portion of the Sun River was explored by prospectors from the Fisk party of 1866.¹⁸ Gold was not discovered and no descriptions of the mountain backcountry were left by this expedition. Elk and abundant deer and antelope were noted in the foothill area near Augusta. The party then passed on its way and left the economic harvest of the mountain area to another generation.

The first herd of 300 cattle was moved into the Sun River valley by The American Fur Company in 1862.¹⁹ By 1868 an estimated 3,000 head of cattle ranged the foothill region of this drainage. A migration of buffalo²⁰ in the winter of 1873 forced the ranchers to move their cattle south of the river. Settlement of the valley continued and Indians were still actively protesting the influx. A number of people were killed by Indians in the 1860's and 1870's. The turning point in the struggle with the Indians occurred in 1869-70 when the army raided the Indians on the Marias River. A smallpox epidemic among the Indians followed to permanently settle the question of who was to control the area.²⁰ The destruction of the buffalo, with the help of the Indians, for the demands of civilization, kept the Indian problem settled. Additional cattle were moved into the "livestock paradise" of the foothill region in the 1870's.

In the early 1870's a sizeable elk population apparently existed in the Sun River drainage. This population attracted the attention of hide hunters who were in the process of finishing off the buffalo population at the time. The area furnished the meat for the U.S. Army detachment at Fort Shaw. R.P. Bloom was a member of the army hunting details and reported that in 1880 deer and sheep were plentiful but only a few elk were in the area.²¹

The foothill community became permanent in 1883 when Phil Manix founded Augusta.²² The "bonanza" phase of ranching began to come to an end in

the winter of 1886-87 when most big cattle outfits lost 50-70% of their cattle.²³ The foothill area showed signs of overgrazing by cattle and sheep by 1890. This led cattlemen to look for greener pastures and in 1890 J. Ford became the first to move cattle, 1800 strong, into the mountain portion of the North Fork of the Sun River. The grass was excellent and at least 14 other large cattle outfits followed him.²⁴

The geographical information gained by the 1866 Fisk expedition was not shared²⁵ and maps published as late as 1877 still showed a blank for the upper Sun River.²⁶ The first generally available, accurate map of the upper Sun River was published by Professor O.J. Mortson in 1887.²⁷

Augusta and Choteau were growing rapidly in the mid 1880's. Much of the lumber for their growth came from sawmills located in the Sun River canyon area.²⁸ Parties of bathers used the hot springs located near the current head of Gibson Lake.²⁹ A catch of 163 fish weighing up to 3 pounds each was made in 1884.³⁰ By 1885, area residents considered the game herds to have been reduced to remnants.³¹ Wolves and grizzlies were active in the prairie regions and began to shift their attentions from game animals to livestock,^{32 33} with 4 grizzlies being killed at Fort Shaw for the bounty in 1885.³⁴ Augusta residents hunted in the mountainous area,^{35 36} and wildlife was still offered for sale in the Helena markets in 1886.³⁷ Subsistence or "pot" hunting by loggers, trappers and others living in the backcountry may have had an impact on the game herds. In the early 1900's there apparently were fewer than 100 people living in the mountains of the Sun River, even though the area was being used for logging and cattle grazing. The horse trails of the time apparently only ran along the larger rivers and did not penetrate deeply into the major areas of elk habitat. Various diseases are known to have been introduced into Montana by the Texas cattle drives and spread with the expansion of the railroads and growth of the cattle industry. It has been fashionable to state that the decline of the wildlife herds in the mountains was due to over hunting. This may have been possible since the animals were hunted during all seasons. However, it is equally possible that new diseases introduced into the wildlife populations spread like wildfire and contributed to the decline.

Great Falls was founded in 1886³⁸ and by 1889 had a population of over 3,000 citizens.³⁹ The first railroad reached this booming pioneer city in 1887.⁴⁰ While Great Falls was still three days distant,⁴¹ its growth and commerce was beginning to have an effect on the Sun River backcountry. Loggers moved into the lodgepole pine and Douglas fir forests of the canyon and North Fork areas. Lumber for the growing towns, ties for the expanding railroads and firewood for the heating stoves⁴² changed the face of this mountainland. The Sun River was used as an avenue of commerce to move the wood products from the mountains down to the town of Sun River and possibly farther. An estimated 100,000 railroad ties were cut during the 1880's and 90's in this area.⁴³ The logging also meant cabins, roads and people. The traces of the road which extended from the Home Gulch area⁴⁴ to near Ray Creek and the logging sluices have now all but disappeared from the face of the land. Other uses of the area were proposed. In 1889, the upper Sun River was explored as a possible route for an east-west railroad.⁴⁵ In the same year, the canyon was surveyed for a possible irrigation dam.⁴⁶

Although hunting in the Sun River area remained good^{47 48 49} there were persistent reminders that the game was declining as the settlement of the land



Early day Augusta.

—(Photo courtesy Montana Historical Society)

proceeded.^{50 51} Some game was still sold locally⁵² although it was illegal. Although wildlife populations in general were declining, the trend for the Sun River elk was on the way up. Some people felt that the animals were being forced into the area by major forest fires in the neighboring drainages.²¹ The diversion of Sun River water for irrigation began.⁵³ Nimrods and fishermen discussed the formation of a sportsman club in 1887.⁵⁴ Unnoticed by the press, an era was drawing to the close in the Sun River backcountry. As the Sand Coulee coal mines came into production in the early 1890's, the coal replaced the firewood cut in the mountains and floated down the Sun River.^{54A} The demand for railroad ties declined and by about 1910 the loggers had turned the keys to the Sun River backcountry over to the cowboys. The reign of the cattlemen over the broad mountain valleys of the Forks of the Sun River persisted from about 1890 to the early 1930's.

Fire was a major ecological factor in the upper Sun River. Newspapers estimated 10% of the Sun River forests were burned each year.⁵⁵ While this was an overestimate (2.3% is probably closer to the truth), it is obvious that this short fire cycle did not permit the accumulation of large amounts of fuel and produced relatively mild fires⁵⁶ contributing to the maintenance of an open lodgepole pine forest.

At least some Montana residents were growing concerned over the use of natural resources. Some newspapers considered the 120,000 people in Montana to be enough and were attempting to stop migration into the state in 1889.⁵⁷ Yes, Montana was becoming crowded. Only fifty years before the population of Indians averaged out at 0.2 people per square mile⁵⁸ and in 1889 it was already up to 0.8 people per square mile. In 1908, it was predicted that all of the timber in the west would be cut by 1942.⁵⁹ The concern over resources included wildlife. Although laws protecting wildlife had been passed by the Territorial Legislature as far back as 1872,⁶⁰ they had not been enforced.⁶¹ It was not until 1889 that a law providing for game wardens was enacted by the legislature.^{62 63} Fish for planting arrived on virtually the first train into the area and in 1889 crappies and trout were enthusiastically planted in the Missouri.⁶⁴ Efforts to preserve a remnant herd of buffalo in western Montana started in 1887⁶⁵ and the area was made a national buffalo refuge in 1908.⁶⁶

Of course, the major thrust of the time was to increase the restrictions on the taking of game even to closing the season for 6 years on some major game species.^{67 68} Other signs of the times were encroaching upon the Sun River. Construction of the Willow Creek Dam began in 1908⁶⁹ as the first step in the building of the Sun River irrigation project which was to extend over the next 20 years.⁷⁰ Wildlife gave other reasons for concern and in 1907, 47 wolves and 354 coyotes were bountied in the general area encompassing the Sun River.⁷⁰ The state paid a bounty of \$10 per wolf but the ranchers sometimes boosted this by as much as another \$75.⁷¹ A one dollar hunting license of this era entitled a person to 1 elk, 1 antelope, 1 sheep, 1 goat, 3 deer, 10 grouse, turtle doves, fool hens, prairie chickens, pheasants and partridges with no limits on geese, ducks and brants.⁷² About 16% of the state's population were licensed hunters in 1911.⁷³

Although the wildlife resources of the Sun River supported many of the early settlers, they also provided recreation as the results of an 1884 hunting trip testify. The wagons of the returning hunters allegedly contained the following:⁷⁴ "One trout, 1 flask (empty), 3 trout, 1 jug, 1 antelope (killed by the Indians), 1 bottle (half full), 2 prairie chickens, 1 jug (empty), 4 blackbirds, 1 grouse, 1/2 deer (killed by Indians), 1 keg (empty), 3 blackbirds, 1 jug (nearly empty), 1 whitefish, 3 bottles (empty)."

Against this background of thought and action the elements of the controversies of modern Sun River fell into place in the early 1900's. The mountain area had been made a Forest Reserve in 1897 and its management turned over to the newly created Forest Service in 1905.⁷⁵ The cattlemen were well established in the mountain valleys of the Sun River backcountry. County game wardens had been



Wolves were an integral part of the system that operated in the Sun River area prior to the appearance of livestock. —(F&G photo)

employed for several years. These were organized together under W.F. Scott as the first State Fish and Game Warden in 1901.⁶¹ The railroads, and later the automobile, were reducing the travel time to the mountains from the towns of the valley. Electricity, irrigation and other amenities were increasing the wealth and leisure time of the local residents.

The elk herds which had inhabited the rough and timbered country along the rivers, when white men arrived, were eliminated during the 1800's. By the 1900's the elk populations were reduced to their areas of strongest habitat, the mountains.⁷⁶ The upper Sun River was somewhat unique in that only renewable resources were exploited by the advance of civilization. As the ballgame began to change at the turn of the century, the stage was set for the reclamation of the land and resources which has provided the struggle for the last 70 years.



20TH CENTURY — FIRST QUARTER

Open Range and “Pot” Hunters

The cattlemen were in firm control of the upper Sun River at the turn of the century. Their cattle roamed the mountain meadows and the towns were cattle towns. In 1901, at least 2,295 cattle and 140 horses were permitted to graze for a 6½ month period in the upper Sun River drainage.⁷⁷ In 1905, the Forest Reserve was transferred from the Land Office to the newly created Forest Service.⁷⁸ The Forest Service took over what was allegedly a station on the Oregon-Montana horse rustling trail to establish its first ranger station in the Sun River area. Although there were 10 to 12 grazing permittees using the drainage, months would go by without backcountry visitors. The South and West Fork areas were served only by trails along the main streams. Neither horse nor game trails extended over the Continental Divide.⁷⁹

No big game was seen in a month long trip through the upper Sun River in September of 1905. The same results were reported for a similar trip through the adjacent South Fork of the Flathead drainage in 1906.⁸⁰ However, a forest guard who had lived in the upper Sun River since 1900 estimated that 1500 elk were present in 1910 and that this represented an increased elk population.⁸¹ Others put the population level at 300 elk.⁸² It was apparently a general feeling that “pot” hunters prevented the elk from wintering in the foothills.⁸³ Many of these early workers reported that the elk relied on browse for a winter food supply.^{84 85} This contrasts with the heavy reliance on grass by the present day elk herd.⁸⁶ The areas listed as winter range in the early 1900’s are more consistent with a browsing food habit than a grazing one.

In these years before 1910, the hunters were harvesting less than 200 elk a year and the herd was felt to be increasing rapidly.^{82 87} The elk population explosion had begun, probably in response to the recovery of the land from the large fires and logging operations of the 1880’s and 1890’s.

A second wave of settlers reached the Sun River in 1909 and 1910.⁸⁸ Settlers were encouraged on forest lands for fire protection purposes and sporadic attempts were made to settle the North Fork.^{89 90} However, in 1908 the population of the upper Sun River consisted mainly of the Forest Guard, the cowboys representing 10

or 12 cattle outfits and about 15 loggers.⁹¹ Major fires burning 72,000 acres occurred in the area in 1910.⁹² ⁹³The construction of the Sun River Irrigation Project began with the intent of drawing water from the North Fork near the mouth of its canyon.⁹⁴ The flooding of the grassy mountain parklands in the North Fork Valley above Sun Butte was first proposed at this time.⁹⁵ The Sun River, which had flooded in 1888⁹⁶ again flooded in 1908.⁹⁷ The 1908 flood necessitated a relief expedition to Augusta loaded with liquor and cigars.⁹⁸ Periodic floods have kept the North Fork Dam proposal alive ever since. The exact location and the name assigned to the dam have varied but it still basically the same project.

Elkmen vs. Cattlemen

As the 20th century began its second decade, a conflict flared between sportsmen and cattlemen. In 1910 a petition was presented to the Forest Service calling for the removal of cattle from the upper Sun River. In 1913 there were 6,560 head of cattle and horses and 5,500 sheep permitted on the national forests of the Sun River.⁹⁹

The lesson of the buffalo haunted many people and the number of game protectionists was on the increase. The season on moose and mountain sheep had been closed for years.¹⁰⁰ ¹⁰¹The protectionists first sought to move the closing date of the season from December 1 to November 15. Their thought was "The elk is such a stupid animal that it is an easy matter to slay them. The elk wallows helplessly in the big drifts and the hunter on snowshoes has no more trouble in killing the brute than if it were tied to a post. Before November 15 the hunter has to stalk the animal and can take pride in hunting".¹⁰²

Although the elk population increase had begun, the hard facts of population biology were seldom recognized. In 1913, the Montana Legislature passed a little discussed and little noticed bill introduced by a senator from Choteau.¹⁰³ This bill created a Game Preserve between the North and South Forks of the Sun River and the Continental Divide. Although other legislative game preserves were to come and go, the one in the Sun River (and the problems it has caused) have persisted for 60 years. All cattle grazing was abolished in the Game Preserve when it was created. This took the cattle and sheep off of the 22,400 acres of marginal winter range in the Preserve, which had been heavily used prior to 1913. Pressure was then increased to abolish cattle grazing in the North Fork outside of the Game Preserve. A letter to *Field and Stream* magazine in 1915¹⁰⁴ claiming that elk were starving served to increase pressure on the Forest Service. This was followed by a petition to the Forest Service signed by 66 parties for the removal of all livestock from the North Fork. A counter petition supporting the cattlemen was also submitted. This represented 81 parties including the game warden, the Augusta and Choteau rod and gun clubs as well as the Great Falls Commercial Club.¹⁰⁵ The Forest Service was the main target of the dissidents as the newly created¹⁰⁶ Office of the State Game Warden was unstable and not effective. Range studies were conducted by the Forest Service and the cattle grazing allowed in the North Fork was reduced by another 25-30 percent.¹⁰⁷

Elk population estimates made in 1910 ranged from 300 to 1,500.¹⁰⁸ In 1910 an estimated 150 elk were harvested and 200 in 1911. Some cattlemen felt that the elk



Few areas in the United States can boast of the variety of game animals found in the vicinity of the Sun River. Elk, the most sought after big game species along the Sun, have been the center of most controversies regarding management of game in the region. The area also supports one of the largest herds of bighorn sheep in the nation. The mountains and foothills of the Sun River Drainage provide the habitat needed to support both whitetailed and mule deer and also meet the requirements of a viable grizzly population. —(Photos by Harold Picton)



and bighorn sheep increased during this period but that the deer decreased.¹⁰⁹ The deer population was estimated at 1,300.¹¹⁰ The first attempt at an elk census was made in 1913 and 965 were actually counted.¹¹¹ Hunters numbered about 150 in 1914 and apparently were about 80 percent successful.¹¹² At this time it was estimated that replacement of the elk by cattle would yield about 22 times as much monetary income for the Sun River community.¹¹³ A similar estimate made for 1970 indicates that elk hunting in the upper Sun River now yields in the neighborhood of five times as much income as the restoration of cattle grazing on this same back-country land would yield.

The future was rather clearly foreseen by the Forest Supervisor of the Lewis and Clark forest in 1915. He noted¹¹⁴ that within three years, the Sun River Game Preserve had acted as a breeding ground for elk. He also noted: 1. That there was little winter food available in the Preserve. 2. That the location of the Preserve served as a haven and prevented more than 8-12 percent of the annual increase of the elk herd from being killed. 3. That the elk herd was rapidly increasing without provision for controlling its size. 4. That the herd would consume all available forage which would force reduction in cattle and in due course the cattle would be eliminated and the range given over to elk. Following this line of reasoning, it was recommended that either the Preserve be opened to hunting, that the Preserve be abolished or that the boundaries be revised so as not to protect the entire herd. The supervisor felt that the communities of the upper Sun River would support these recommendations. He also felt that the pressure for preserving game came from those who never entered the forest and even lived miles away from the forest.

Improved travel provided by a new rail line and the increasing use of automobiles, as well as the publicity concerning the dam construction tended to draw the interest of outsiders to the mountain area. The human population growth was reflected in Great Falls, which housed 13,948 in 1910 and 24,121 in 1920.¹¹⁵ This larger more mobile population added to the woes of the Forest Service in its attempt to manage the forest lands.

A Growing Elk Herd

The elk herd grew rapidly reaching a count of 1,479 by 1916 and 1,708 by 1917. In 1920 two hunting guides claimed that there were 5,000 elk in the Sun River area and said that they felt that there had been a 10 fold increase since the Preserve had been created.¹¹⁶ Actual census figures suggested that the real increase was 2 to 3 fold. These animals competed with 2,400 cattle in the North Fork for winter forage.¹¹⁷ Nine affidavits were submitted to the Forest Service by cattlemen stating that there was no starvation of elk in the North Fork. Hunters in the area reported that the cattle and elk had left so little forage that there was none left for pack stock.^{116 117} They also reported that bighorn sheep outnumbered the deer 25 to 1. Legislative action was proposed to add winter range to the Preserve but the move failed.¹¹⁸ Overuse of cattle range in other portions of the Sun River began to be reported.¹¹⁹ The first substantial movement of elk across the Continental Divide was reported in 1917.¹²⁰ During this period, the majority of the herd wintered along the South and West Forks of the upper Sun River while the cattle were concentrated in the valley of the North Fork.¹²¹

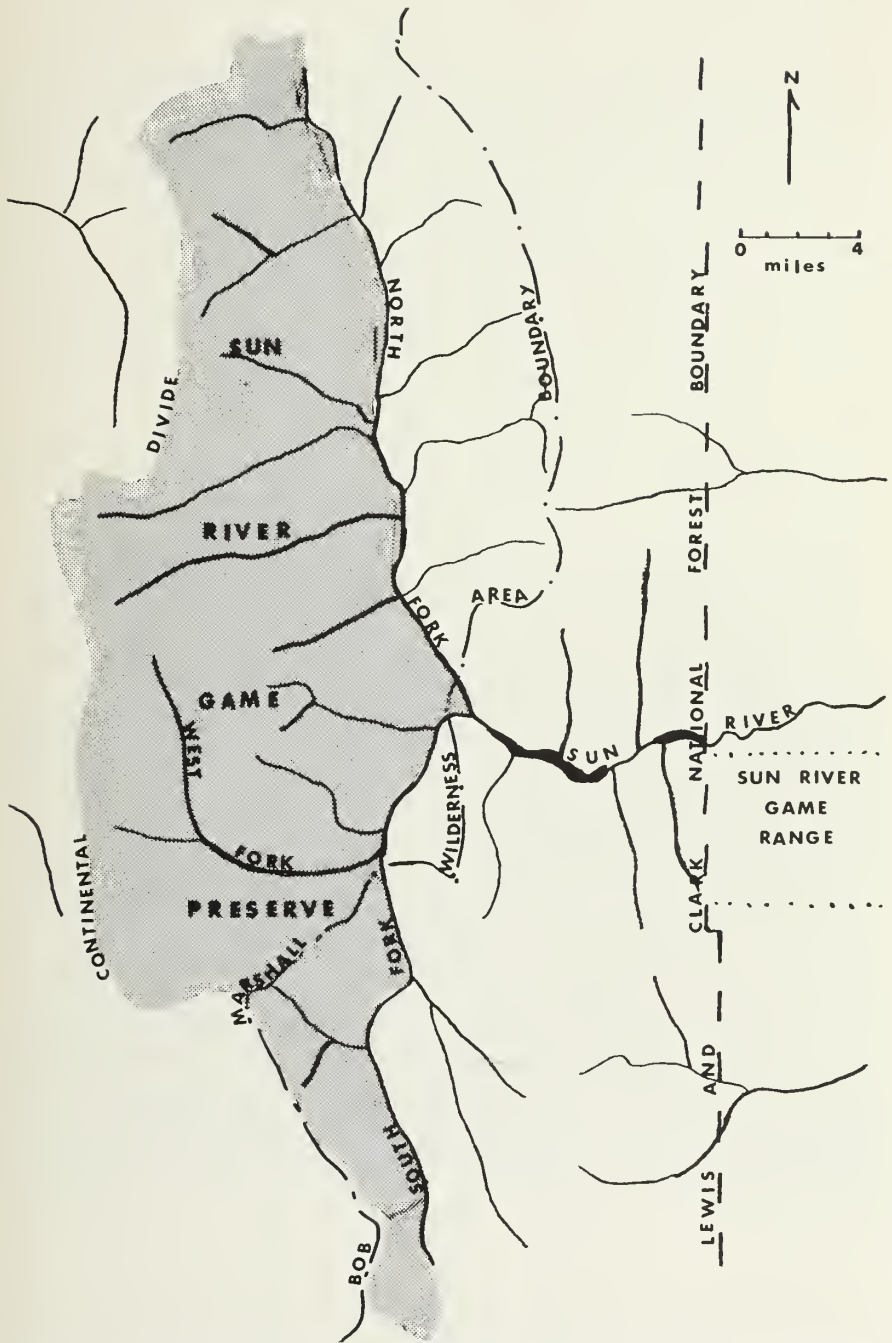


Figure 2. The upper Sun River drainage showing the Sun River Game Preserve and the Sun River Game Range, also positions of the boundaries of the Bob Marshall Wilderness area and the Lewis and Clark National Forest.

Migrations Reported

Studies in 1925 showed that the South and West Forks were severely overgrazed. Some winter loss of elk and a subnormal calf crop were reported during the winter of 1921-22. The continued increase of the herd to at least 2,495 in 1925 apparently encouraged emigration and by 1925 a regular westward fall migration was reported across the Continental Divide. The Spotted Bear Game Preserve was established on the west slope of the Divide in 1923 to protect these emigrants from the Sun River. Early heavy snows in 1925 brought the first hunting harvest of over 600 elk and considerable numbers of elk appeared on the Great Plains for the first time in this century. Some of these elk were seen 24 miles east of the mountain front.¹²² The critical condition of the South and West Fork ranges apparently encouraged many elk to winter along the North Fork. Although the number of cattle grazed in the North Fork outside of the Game Preserve had been halved, the area was still heavily grazed and the addition of up to 1,000 wintering elk soon made range conditions critical in this area also. These wintering elk scavenged the bighorn sheep range in the area. The short rations triggered an outbreak of lungworm and in 1924-25 an estimated 70 percent of the bighorn sheep herd was lost.¹²³



Cattle being rounded up on National Forest in Arsnic Creek 1925. Season of use June 1 through October 15. —(U.S.F.S. photo)

During this period of years the Montana Fish and Game Department lacked biologically trained personnel and did not bare much influence on Sun River elk management. It was in this period that the Fish and Game Commission considered creation of an elk hatchery or farm to furnish animals for transplanting.¹²⁴ The planting of bullfrogs around the state was also an item of business.¹²⁵ The commission in its present form, but without present powers, was created in 1921.¹²⁶

A Quarter Century in Summary

The first quarter of the 20th century saw the elk herd grow from a relatively small herd to a population threatening its own habitat as well as cattle grazing in the upper Sun River. The increased population and improved transportation brought an open conflict between individuals pursuing their separate ideals of wilderness America and the cattle industry. Because the newly created Office of the State Game Warden was still weak and politically unstable, the U.S. Forest Service took the brunt of the problems. The closing years of the period saw an increasing involvement of professionally trained foresters in the management of the area. These professionals consistently recommended the abolition or modification of the Game Preserve.



20TH CENTURY—SECOND QUARTER

A Bankrupt Range

The second quarter of the 20th century began with the Sun River ranges in poor condition and with low elk calf crops as a result. Sportsmen questioned the Fish and Game Commission about the poor range in the Sun River and Spotted Bear Game Preserves. The woolgrowers blamed the situation on the elk and requested that the elk be killed.¹²⁷ Hunting still failed to harvest the annual increase and in 1928, 3,180 elk were counted. Severe overgrazing was reported in many areas and in the severe winter of 1927-28, 2,261 elk were counted wintering on private lands outside of the mountains. The bankrupt range again collected its due in 1927 with a dieoff of bighorn sheep.¹²⁸ In the late 1920's considerable winter use of the unpalatable beargrass by elk was reported.¹²⁹ In the winter of 1929-30 over 2,000 elk again wintered on private lands.¹³⁰ A dieoff of several hundred elk was reported for this winter.¹³¹ Forest Service investigators reported that the calf loss was so heavy that the coming crop had dropped to only two percent of the herd by May of 1930.¹³² One-half of the dead elk which were found were calves.¹³³ The ticks responded to the poor condition and lowered resistance of the elk and heavy infestations on the elk were found.¹³⁴ The winter losses, the low calf crops and the harvest of 1,072 elk in the fall of 1930 finally reduced the herd to a moderate overpopulation instead of an extreme one. The anti-cattlemen forces continued their efforts and forced a decrease in the cattle allotments in the North Fork. The Forest Service was faced with a situation in which the elk could not be controlled due to public pressure and the legislative Game Preserve. Thus the cattlemen were forced to reduce their livestock on the forest.

The Fish and Game Department was beginning to move slowly in the direction of the then new concept of scientific game management. The State Department took its first steps by assisting the Forest Service and U.S. Biological Survey in a study of Montana elk in 1930.¹³⁵ However, the management burden still fell upon the federal agencies. The state wildlife agency was beginning to acquire fame and controversy and was subjected to the first of its many legislative investigations in 1927.¹³⁶ In 1931 the 28 man department consisted entirely of game wardens.¹³⁷ The legislature retained the power to set hunting seasons, thus the Fish and Game

Commission lacked both the knowledge and the power to solve the Sun River elk problem.

A Prediction Come True

The depression years began the 1930's. These years were depressed, not only for the human population, but also for the Sun River big game. Drought¹³⁸ and below normal temperatures¹³⁹ beset the 1930's. Too many elk and too few beaver were the conservation problems of the era.¹⁴⁰ The Sun River situation begged for solution and a few very tentative attempts were being made at cooperation by public officials, cattlemen and sportsmen.¹⁴⁰ A survey in 1932¹⁴⁰ by 9 representatives of these groups found the winter ranges to be overgrazed and erosion rampant along the North Fork. Some people gave estimates of as many as 7,000 elk in the area. A systematic census in 1932 located 2,098 elk and 3,194 in 1936. The group of cooperators concluded that either more winter range would have to be found or the herd reduced.¹⁴¹ The bighorn sheep herd gave testimony to the range conditions with winter losses in 1932.¹⁴² In the struggle to preserve the ranges, the Forest Service reduced the livestock grazing in the upper Sun River by 87% from 1912 to 1932. Winter losses of elk again occurred in 1935.¹⁴³ Conditions in the neighboring South Fork of the Flathead drainage were also very severe with estimated winter losses of 1,575-2,275 elk from 1933 to 1937 as compared with 1,606 elk taken by hunters.¹⁴⁴ The professional personnel of the Forest Service and the Biological Survey consistently pointed out the need for larger harvests of elk. Although these officials felt that the anti-cattlemen forces represented only a minority of the public¹⁴⁵ the governmental agencies did not control the situation. Sportsmen continually criticized the elk counts made by the Forest Service and the foothill ranchers felt that their very livelihood was threatened by the elk herd.¹⁴⁵ Professional advice was not heeded, the harvests remained low¹⁴⁶ and the recommended changes in the Game Preserve were not made. It was in 1934 that the predictions made by Mr. Spaulding 20 years before came to pass and the last cattle were withdrawn from the North Fork of the Sun River.^{146A}

The Fish and Game Department representative in the Sun River during these years was Mr. Bruce Neal, the deputy game warden. Mr. Neal had worked for the Fish and Game Department and the Forest Service since the early 1900's. His bias in favor of the elk was well known.¹⁴⁷ ¹⁴⁸ In 1934 a joint winter study of the elk was conducted by Mr. Neal and L.J. Howard of the Forest Service.¹⁴⁹ They reported seeing 2,500-3,000 elk and confirmed the migration from the Flathead country into the Sun River. It appeared that deer were increasing from the low point of previous years. In the 1930's and 1940's, Mr. Neal continued to champion the cause of the elk and proposed the purchase of winter range.¹⁵⁰ He devoted considerable effort to create the spirit of compromise that eventually led to the purchase of winter range for the elk.¹⁵¹ In the late winter of 1934 a primitive area encompassing the upper Sun River was approved by the Chief Forester of the United States.¹⁵²

In 1933 it was felt that the Fish and Game Commission did not have the authority to kill trespassing elk.¹⁵³ As a result "The most novel big game experiment ever undertaken" was proposed to alleviate the over-population of elk.¹⁵⁴ It was proposed to bunch the herd along the cliffs of the Chinese Wall and then drive



Bruce Neal, long time warden and first manager of the Sun River Game Range.

—(Photo courtesy Billie Pond)

them into the "wilderness of the southern Teton County, where abundant forage is available". This noble proposal was never adopted and certainly would have been a challenge for even Montana cowboys. Some Arizona cowboys had attempted to drive deer across the Grand Canyon.

The Fish and Game Department still lacked the stability to handle the emerging game management. A depression economy program brought a reduction in public relations publications and the firing of a quarter of the game wardens.¹⁵⁵ Controversy erupted when the governor requested resignation of the Fish and Game Commission.¹⁵⁶ Amid charges of bootlegging¹⁵⁷ a new governor attempted to fire the Commission again¹⁵⁸ in 1934. In the four month long brawl which followed, two Commissions were named and cries of "take the Department out of politics" echoed through the halls of the capitol.^{158 159 160 161 162}

Elk Management Problems

Reports from this period continued to tell of poor conditions on the mountain ranges.^{163 164 165} The poor range conditions were reflected in the health of the game animals and in 1936 the mountain sheep again suffered a substantial dieoff from lungworm.¹⁶⁶ The lower North Fork was closed to use by pack stock because of the poor range.¹⁶⁷ Increasing effort was made to harvest the elk herd. The first split



Ear tagging of elk calves has provided much knowledge about elk biology. For most purposes, calf tagging has been replaced by the more efficient trapping and neck banding of adults.

—(Photo by Harold Picton)

hunting season for the area was tried in 1934.¹⁶⁸ This season attempted to force elk off of private lands and into the area north of Gibson Lake.

The tagging of Sun River elk calves was begun in 1937 and of the tags recovered from 1937 to 1941, 20 percent were from locations from outside of the Sun River drainage. As only two percent of the tags recovered from 1957 to 1960, after adequate winter range was acquired, were from outside of the Sun River, it appears that the heavy population pressures of the 1930's might have induced emigration.¹⁶⁹ The mule deer apparently increased to a substantial level by 1938 and their winter browse supply was still adequate.¹⁷⁰ Previous to this, some observers felt, the deer population had been held down by competition with elk for the available browse supply.¹⁷¹ The harvest rate for the elk herd had been increased and the hunters apparently reduced the herd somewhat with 2,011 elk being counted in 1940. Elk wintering along the mountain front continued to cause conflict with landowners. The first efforts (unsuccessful) to use the wildlife resources of the Sun River to restock other areas of the state was made in 1938¹⁷² ¹⁷³ with attempts to trap mountain goats and bighorn sheep.

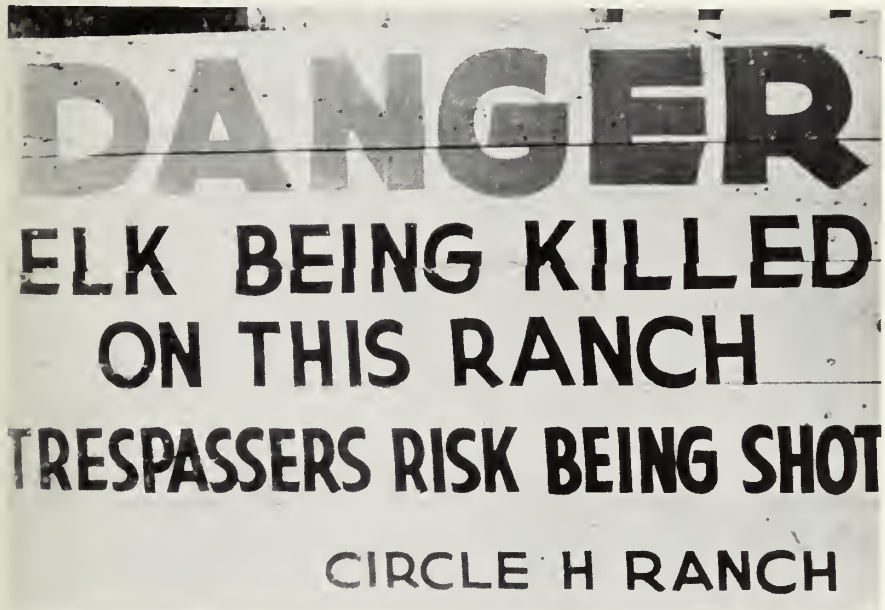
All was not peaceful on the political scene. In 1934, the U.S. Secretary of Agriculture, Henry Wallace, ordered the Forest Service to assume all management of wildlife in national forests.¹⁷⁴ The Sun River district was to be used as a test area and the Montana Fish and Game Commission indicated that it would fight the plan to the Supreme Court.¹⁷⁵ Nothing came of this test but the struggle over state versus federal authority is still going on today. A proposal, attributed to the Forest Service, to open some of the Sun River Game Preserve to hunting, inflamed the situation.¹⁷⁶ It was at this time that the Fish and Game Commission found that it lacked authority over the Sun River Preserve. The Spotted Bear Game Preserve, companion to the

Sun River Game Preserve, was abolished in 1936¹⁷⁷ with little controversy.

On October 21, 1938¹⁷⁸ a three column advertisement was placed by Mr. C.R. Rathbone of the Circle H Ranch near Augusta. It stated that although the state agency had maintained elk herders on the ranch for 5 years, he still fed over 500 elk all winter. The advertisement then stated an offer to hire persons with machine guns or other means to kill up to 1,000 elk with guarantees against prosecution by government agencies. The general public apparently was sympathetic to compensation for his losses but did not feel he had the right to slaughter the elk.¹⁷⁹ It was at this time that the first proposals to use public funds to purchase winter range for the herd surfaced in the press. Rathbone's action forced the situation to a head. The Fish and Game Commission set up a season to attempt to force the elk from the area.¹⁸⁰ An intensive elk study was begun by Mr. Robert Cooney, then working for the Forest Service.¹⁸¹ ¹⁸² The hunting season was at least a partial success.¹⁸³ ¹⁸⁴ ¹⁸⁵ ¹⁸⁶ The controversy continued. An elk was killed on the Circle H ranch and Mr. Rathbone was prosecuted. He was found guilty and appealed to the Montana Supreme Court¹⁸⁷ which concluded that Mr. Rathbone did have a right to protect his property from actual wildlife damage, in certain situations. The Supreme Court reversed the lower court and remanded the case for a new trial. The attempts to herd elk were specifically found to have been ineffective.¹⁸⁷

In the spring of 1940, Robert Cooney became the first biologically trained member of the Fish and Game Department when he was appointed state big game manager.¹⁸⁸ Elk management in the Sun River and the northern Yellowstone areas was generally recognized as the major wildlife management problem in Montana.¹⁸⁹

The slow building of a cooperative program in the Sun River which had begun in the early 1930's continued into the 1940's.¹⁹⁰ In spite of the Rathbone incident



Elk use of private land led to the posting of this sign in the late 1930's. The ranch is now part of the Sun River Game Range.

—(Photo by Harold Picton)



The bighorn sheep is the animal most severely affected by range competition with elk in the Sun River area. —(F&G photo)

and other objections to herding¹⁹¹ the balance remained on the side of cooperation. Governor Sam Ford, elected in 1940, pledged to keep the Fish and Game Commission out of politics^{192 193} which was heartily approved by the public media.

The ecological patterns of previous years persisted into the 1940's. The reports of range damage¹⁹⁴ and winter losses of elk¹⁹⁵ continued. The rate of tag returns from outside of the Sun River drainage remained high.¹⁹⁶ There was a continuing loss of bighorns to lungworm and other diseases during the early 1940's.¹⁹⁷ The bighorn population apparently fluctuated during these years.¹⁹⁸ Range competition between horses and elk was prevalent.¹⁹⁹ The mule deer were rapidly increasing²⁰⁰ and the harvest of deer under the buck law was not sufficient to prevent the winter loss of both whitetails and mule deer in 1943.²⁰¹

Another ecological flux was now beginning to be felt by the big game wildlife of the area. In the years before 1920 fires had been common in the upper Sun River, burning an average of 10,000 acres a year. As these areas recovered they provided browse and wintering areas. The successful fire control programs after 1920 reduced the burning rate to 200 acres a year and then even lower.⁹³ The resulting tree growth and closure of the forest canopies reversed some of the ecological conditions which had produced the great elk population explosion of the turn of the century. These processes probably also accentuated the elk problem along the mountain front.

World War II caused some difficulty in the management of the elk herd. Gasoline rationing limited travel and the communities were depleted of many

hunters. However, meat was needed²⁰², and elk management was needed²⁰³ and the federal government made ammunition available for hunters.²⁰⁴ The hunting harvest ranged from 200 to 1,200 during the war years.²⁰⁵

The era of big game salting began in earnest in 1942 when 5½ tons of salt were dropped in the Sun River area. The objective was to draw the elk away from the abused winter range.²⁰⁶ Many thousands of dollars were spent on the salting of the Sun River ranges in attempts to control range use and movements. The program was discontinued in the mid 1950's after a detailed evaluation by Merle Rognrud, of the Fish and Game Department, showed that the program simply did not work and was a waste of money.²⁰⁷

The U.S. Congress passed the Pittman-Robertson Act in 1939 and under it, Montana set up the Wildlife Restoration Division of the Montana Fish and Game Department in 1941. Thus, for the first time the state of Montana could begin to match the professional expertise of the Forest Service. As the state built up its professional game management division, the burden of public conflict shifted from the Forest Service to the Montana Fish and Game Department. In 1943 the Sun River Conservation Council was established in an attempt to resolve the Sun River elk conflict. Organized by Tom Messelt, the council initially included T. Messelt, A. Riegel and J. Gleason representing the Great Falls, Helena and Choteau sportsmen groups. The livestock industry was represented by C. Willard, C. Malone and L. Barrett.²⁰⁸ The open-mindedness of these men began to offset some of the pettiness that had been a part of the Sun River story and the groundwork was laid for future progress.

The recreational use of the Sun River was estimated to total 17,825 visits in 1940. Visitor use was to double by 1950 and to triple by 1960.²⁰⁹ Hunting and fishing probably accounted for about 60 percent of these visits.

Sun River Game Range Acquired

As the last half of the forties began, the harvest rate and calf crops of the elk herd remained high.^{210 211} Range damage and calf losses were still reported and the winter loss was estimated at 4 percent of the elk herd.²¹²

In 1946, the three year old Sun River Conservation Council surveyed the scene and considered the possibilities for acquiring additional elk winter range. The eleven man group had broad representation: Rancher representatives J.L. Barrett, Cascade; C. Malone, Choteau; C. Willard, Augusta; Sportsmen representatives H. Daly, Choteau; N.R. Elton, Valier; F.F. Sparks, Augusta; W.R. Davis and T. Messelt, Great Falls; Agency representative R.T. Ferguson, U.S.F.S.; R.L. Cooney and F. Couey, Montana Fish and Game Department.²¹³

Late in 1947, Mr. Brucegard, an elderly rancher with land bordering the National Forest under Mt. Sawtooth, offered his land for sale to the Montana Fish and Game Department. This offer was made at 11 o'clock on a Saturday and the banks closed at 12. A certified check had to be delivered that day or the land would revert to another buyer. The Department could not raise the money on such short notice so Mr. O'Claire, the State Game Warden, called Tom Messelt and Carl Malone. These two gentlemen raised \$10,000 between them and saved the land for the elk.²¹⁴ More land was added later until the Sun River Game Range has come to

total nearly 20,000 acres of state owned and leased land. Considerable interest was expressed in using the new game range for various kinds of game²¹⁵ but it has continued to be reserved for elk. For the first time since very early in the twentieth century, the elk had a reasonably adequate winter range.

Following the purchase of this foothill land a shift in the wintering distribution of the elk was noted. In the winter of 1946-47, 36 percent of the elk counted had been in the area of the new game range. By 1949-50, 79 percent of the elk were found on the game range. The number of tag returns from outside the Sun River dropped to 7 percent. The elk herd census provided one of the highest counts on record, 3,265 elk in 1950.²¹⁶ This increase was seen as part of a general increase in big game throughout the state.²¹⁷ Although the range situation of elk improved, the bighorn sheep population remained static.²¹⁸ Little information concerning the deer herd is available but the buck harvest increased and the wintering fawn crop dropped rather radically.²¹⁹

In 1949 the Legislature finally released its hold upon season setting in the Sun River area. In previous years, the Fish and Game Commission could only control the harvest by shortening the season after giving five days notice.²²⁰ The limited power, in this regard, of the Fish and Game Commission, had led to extreme fluctuations in harvest and inefficiency in elk herd management.

A Half Century in Summary

At the midpoint of the century, the cattle-elk conflict had been defused. Although the Rocky Mountain Unit of the Lewis and Clark National Forest still furnished about 18,000 cattle, horse and sheep months of grazing annually,²²¹ the major areas of conflict had been eliminated. The population increase of the area (Great Falls 57,629 in 1960) and improvement in transportation (about 2 hours from Great Falls to the Sun River canyon) increased the visitors to the upper Sun River from probably under a thousand in 1900 to 35,780 in 1950.²²² The increasing use had brought the conflicts which forced the removal of cattle as well as the acquisition of the Sun River Game Range. Although noble moments in the behavior of men were seen, petty bickering, harping and personal attacks were more often the rule. After the extensive fires and logging of the 1880's and 1890's, the elk herd increased at an explosive rate. Extensive burns continued until effective fire control was imposed in the 1920's. The North Fork range had been severely damaged by the early 1930's and gullying and sheet erosion was common. One anonymous worker even despaired of being able to grow quack grass in the area. Some areas were plowed and planted to timothy in order to revegetate them. The majority of the upper Sun River drainage was set aside as the Sun River Primitive Area in 1934. In 1940 this area was consolidated with adjacent areas to form the Bob Marshall Wilderness Area. The half century mark still found professional biologists recommending that the Sun River Game Preserve be modified, just as they had been doing for nearly 40 years.

Because of the incompatibility of grizzlies and livestock, the grizzly bear population was probably lower during the years of cattle grazing in the back-country. Track counts suggest that the grizzly population of the Sun River increased 26 percent from 1941 to 1954.^{223 224}

Mr. Bruce Neal became active in behalf of the elk early in the 20th century.²²⁵ He later became the Deputy Game Warden for the area and thus literally was the Sun River branch of the Montana Fish and Game Department for many years. His interest and enthusiasm stimulated many others to actions on behalf of the wildlife. Originally from Pennsylvania, Mr. Neal remained a colorful and prominent figure past his retirement in 1956 into the 1960's.²²⁵ A Mr. Neal served as the manager of the new game range from 1948 to 1956, when he was replaced briefly by his son Bob and then by Mr. Bert Goodman. Mr. Paul Hazel, "Pinnacle Paul" is another colorful resident of the Sun River backcountry where he has resided for more than 50 years. This knowledgeable and quiet gentleman has furnished generations of Forest Service and Fish and Game officials with counsel.

The biological knowledge acquired during these years had been the work of many: W. Rush and B.P. Martin of the Forest Service; C.C. Sperry of the U.S. Biological Survey; Robert F. Cooney, F.M. Couey and M. Rognrud of the Montana Fish and Game Department. By the mid-point of the century the foundation for game management based on biological fact had been laid.



20TH CENTURY — THIRD QUARTER

The Controversy Returns

As the second half of the 20th century began, the soon to be discontinued big game salting program was in full swing. The state bought 150 tons of salt in 1951²²⁶ with much of it slated for the Bob Marshall Wilderness.²²⁷ The undying plans to dam the Sun River near the wilderness boundary were revived in 1951, this time as a flood control structure.²²⁸ After a twelve year absence, the Fish and Game Department again became the object of a political controversy in the gubernatorial election of 1952.²²⁹

The hard won cooperation which had culminated with the purchase of the Sun River Game Range began to disintegrate in the early 1950's. Since the early 1940's the Fish and Game Department had gradually acquired superior technical expertise in wildlife management to that of the Forest Service. Thus the state agency came into its own as the wildlife management agency in the Sun River. The Forest Service provided critical support, but was now to play a supportive role. The acquisition of winter range pretty well took the cattlemen out of the picture except for a couple of neighbors to the state owned land. The leadership of the Cascade County Wildlife Association was changing. While the Sun River Conservation Council continued to function, their views diverged considerably from those of the Cascade County Wildlife Association. The ensuing controversies were largely between the Cascade County Wildlife Association and the Fish and Game Department. Other groups such as the Choteau Rod and Gun Club alternated in support of the Fish and Game Department and the Cascade County Wildlife group. Some other sportsmens groups, such as the one in Shelby, often supported the professional managers in their efforts.

The spring of 1950 produced an elk count of 3,265 elk in the Sun River drainage.²³⁴ A harvest of 1,462 elk in 1950 and 1951 reduced the herd somewhat in the early 1950's. However, in 1953 the harvest dropped to under 300 for two years. The large population of elk prevented the new winter range from improving in condition^{230 231} and the danger signals once more began to accumulate. In 1954, the Sun River Conservation Committee recommended that the herd be reduced from over 3,000 to 2,300 animals.²³² This meant a recommended kill of 700 animals. The

divergence in views of sportsmen became apparent when the Cascade County Wildlife Association rejected this along with professional advice and recommended a kill of 400 elk.²³³

The shift of the elk to the new winter range appears to have benefited the big-horn sheep herd and a clear increase was apparent by 1952. The first sheep hunting season in 40 years resulted in a harvest of 16 adult rams in 1953. The deer herd was rapidly approaching the starvation point and in 1951 either-sex deer seasons were begun in the area.

Elk Harvest and Conflict

In 1955, the elk herd was teetering on the brink of disaster. The calf crop remained high and the herd grew to produce a count of 3,376 in 1955. Then, in 1956, the calf crop began to drop.²³⁴ This evidence of trouble was reinforced by the condition of the grass plants on the Sun River Game Range which suggested that the elk herd was once again approaching the limits of its food supply. As 1955 drew to a close, it appeared that the hard won gains in the management of the Sun River were about to be lost. A reorganization of the Fish and Game Department in 1955 had the effect of strengthening the professional management organization in the area. But, as is common in human affairs, the old order, both within and outside the Department, did not yield to the new order easily or gracefully. Much of the appeal of wildlife is based upon emotions and the next decade called forth the full range of them from the human participants on the Sun River scene.

A detailed study of the massive salting program, that had been carried on for about 15 years, was made. The results were so totally negative that the program was dropped. It appears that big game animals are physiologically well adapted to their environment and do not require supplemental salt. Cattle differ from elk physiologically, and elk appear adept in getting the salt they need from their habitat.²³⁵



Salt blocks being dropped in an unsuccessful attempt to distribute elk.

—(F&G photo)

Controversy over the numbers of elk counted, range conditions and the numbers of elk to be harvested evolved into a bitter battle between professional wildlife managers and the leadership of the Cascade County Wildlife Association. Joint aerial elk counts using sportsmen as observers did nothing to reduce the intensity of the conflict. The Fish and Game Department succeeded in carrying out its management plan with the backing of the Forest Service and the Sun River Conservation Committee. A high harvest rate was maintained (averaging 621 for the 5 year period ending in 1959), and the range was saved for the time being. This was achieved at the cost of an atmosphere of bitter and open conflict.

The upper Sun River dam proposal (termed the Sun Butte Dam) continued to be opposed by the conservation groups.²³⁶ The idea had been revived by the floods of 1953 even though these floods centered east of Great Falls.

In 1956 the Sun River again became the object of political controversy in the gubernatorial race. The Sun River Game Range includes 3,410 acres of state school lands. Oil companies had proposed leasing these lands for oil and gas exploration. The candidate for governor supported the request of the oil companies. The incumbent governor (who was also an oilman) opposed the leasing of this land.²³⁷ The Sun River Conservation Council and the Cascade County Wildlife Association also opposed this leasing.²³⁸ Finally the State Land Board, with the support of the Superintendent of Public Instruction, removed the elk winter range from the oil and gas lease sale.²³⁹ This killed the issue until 1969 when one of the early acts by a new Fish and Game Commission appointed by a new governor was to approve oil exploration on the game range.²³⁹ A B The action evoked little controversy at that time.

The bitter controversy over the management of the elk herd swirled into the 1957 session of the Montana Legislature. The Fish and Game Committee of the House of Representatives was led to comment "The Commission and Department are pressured by organized minority groups, many times against their wishes and better judgment." Therefore, the committee recommended a "hands off policy." Representative Rieder, the chairman, was led to note that public relations with the Fish and Game Commission and Department would be improved if organized minority groups would refrain from dictating policy to the Department.²⁴⁰

An aerial count of 3,516 was made in 1957 and signs of range deterioration continued to be found.²⁴¹ An effort was made to reduce the herd and 850 elk were taken in the hunting season.²⁴² The joint aerial counts fell into disuse and separate counts were made by the Cascade County Wildlife Association and the Fish and Game Department. Local wags were heard to comment that control towers should be installed to regulate the conflicting aerial operations. The counts differed, of course, by as little as 17 to as much as 1,000,^{243 244 245} with the sportsmen on the low side. The sportsmen gave no consideration to differences in type of aircraft, observer experience and the ephemeral weather conditions.^{246 247} The spokesmen for the sportsmen presented their counts as absolute fact and the Department counts as distortions of the truth. In one of the meetings of this era a Department spokesman was interrupted by a shout, "Enough of these facts—we want proof," when the lieutenant governor announced that he would support the ouster of the Commission in response to sportsmen demands.²⁴⁸ A legislative investigation of the Department was again requested. The Montana Wildlife Federation refused to en-

dorse the request for an investigation or firing of the Commission.²⁴⁹ A second ring in the Sun River circus opened when the Montana Wildlife Federation joined the Cascade County Wildlife Association in opposing the abolition of the Sun River Game Preserve.²⁵⁰ This had never been proposed by the Fish and Game Commission or Department personnel although it would have been justified. The outburst appears to have been caused by rumors of logging in this portion of the Bob Marshall Wilderness Area.²⁵⁰ The third ring in the circus appeared when opponents to Department elk management testified while the Legislature began an investigation of the Department in January of 1959. The investigation again ended with support for the Department.

In 1959 the Cascade County Wildlife Association counted 1,000 fewer elk than had Department personnel.²⁴⁵ Two confrontations were held in Augusta and the Cascade County Wildlife Association recommended a kill of 350 compared to the department's quota of 600. The arguments revolved around the difference in counts with the higher departmental count being rejected as a falsified figure.^{251 252 253} In this period the Sun River Conservation Council had attempted to remind the public that range conditions in the Sun River Game Preserve were poor and supported the Department in its recommendations.²⁵⁴ The Cascade County group also called for a resumption of the ineffective salting program which had been discontinued three years before. As a public relations gesture, departmental personnel indicated a willingness to compromise on this.^{251 253} The Commission compromised on the harvest quota by setting the kill quota at 450²⁵⁵ with an extended bull season.

The battling momentarily let up when the groups joined hands to oppose the installation of intercontinental ballistic missile launching sites^{256 257} on the Sun River Game Range.

In 1959-60 at least a dozen rumors were widespread in the Sun River community. These ranged from the completely untrue to those which were merely total misrepresentations of the facts. Charges were made that cattle were being run on the Sun River Game Range (this one was a complete untruth since the Game Range had always been reserved for elk). Another charge stated that valuable elk land was given to a neighboring rancher. The truth of the matter was that 225 acres of land not used by elk was traded for a permanent easement on 15 sections of a neighboring ranch for elk to use in their migration to the Sun River Game Range. Routine charges that all of the elk were killed off were made each year from 1955 on. An experiment in providing the elk with a phosphorus supplement brought accusations of poisoning the elk; (the elk ignored the phosphorus supplement). Unfortunately many of the attacks became personal and far beyond the realm of good taste.

The improved transportation and communications were probably, to a large degree, why the management plan succeeded during this five year period. The circle of concern for the Sun River had widened even further, and the support of many sportsmen groups away from the Sun River served to counteract the deeply embedded controversy in the Sun River community.

The calf crop improved from the low point seen in the early 1950's, but it did not reach the high level seen during the 1940's. The improved range conditions resulting from the increased harvests increased the calf survival through the winter. The increased harvests of elk and deer enabled the bighorn sheep herd to increase. About 35 adult rams were harvested each year through this period, 53 other sheep

were removed over the 5 year period for transplanting and some were killed illegally. The deer range in the Sun River was in fair to poor condition with some winter loss occurring. Either-sex deer seasons produced a harvest of 5,900 mule and white-tailed deer over the five year period.

In 1960 the Cascade Wildlife group again launched a general attack on the Department over the size of its professional staff.²⁵⁸ The elk quota for the 1960 Sun River season was set at 400.²⁵⁹ This again was an election year, and the Cascade County group approached the gubernatorial candidates to press for revision of the Department.²⁶⁰ The Department attempted to protect the management program by beginning an intensive study of the Sun River elk. ²⁶¹²⁶² The struggles of the 1950's culminated with the transfer of Mr. Reuel Janson, District Game Manager since 1955, from the Great Falls District.²⁶³ The durable Mr. Janson was not the first professional management individual to move. Eng, Saunders, Casagrande, Picton, and Munro had all come and gone in the previous 10-year period.

The Controversy Continues

After a brief interlude to change personnel, the battle to keep the herd in balance with the range flared anew in the fall of 1961. Merle Rognrud, the new game manager, and other Departmental personnel felt that the kill should be increased.²⁶⁴ ²⁶⁵

An effort to compromise was made and a kill quota of 450 was recommended to the Commission by the technical staff.²⁶⁵ The Cascade County Wildlife Association



The Chinese Wall and Larch Hill Pass are typical of the Continental Divide in the Sun River area. The presence of fewer than a dozen passes across the cliffs of the 60 miles of the Sun River Continental Divide somewhat restricts migration between the Sun River and South Fork of the Flathead drainages.

—(Photo by Harold Picton)



The elk often form large groups to begin their spring migration from the winter range into the high mountain country. —(Photo by Harold Picton)

requested a kill of 250 with the season to end on November 5.²⁶⁴ The Fish and Game Commission attempted to pacify the Cascade County group and set a quota of 450 with the quota to drop progressively to 250 by December 31.²⁶⁶ This quota pleased no one and brought complaints from the Cascade group about the lack of influence which public opinion (meaning theirs) had on the management program.²⁶⁷ One of the complicating factors in this battle was that weather conditions for counting were so bad that the professionals did not attempt one and the Cascade County Wildlife Association had counted only 2,000 elk.²⁶⁴ In the end the kill did not reflect the battle over the quota as the kill reached 583 due to a sudden appearance of winter in November.²⁶⁸

The condition of the elk winter range was stable from 1960-1965. In 1960, it was thought that the portion of the elk herd which lived outside of the Game Preserve was the most heavily harvested and was also the most productive. It was believed that the Game Preserve elk delayed their migration so that they largely escaped harvest and thus, had a very low calf crop.²⁶⁹ ²⁷⁰ A research project to investigate the effect of the Game Preserve was begun, and it later demonstrated that this interpretation was correct.²⁷¹ The calf crop declined from 37 calves for each 100 cows in 1960 to 24 in 1965 as the Game Preserve elk came to represent an increasingly larger percentage of the total herd. This low level of reproduction caused considerable concern in spite of interest in maintaining a smaller herd. Only 2,051 elk were found in the aerial count of 1965.²⁷² Attempts were made to change the harvest pattern and boost productivity but every change was opposed vigorously by the Cascade County Wildlife Association. A new citizens conservation group in Great Falls supported the Department, as did other clubs in the area.

Once again the Sun River Game Preserve prevented efficient and effective management of the herd. The lowered elk population benefited the bighorn sheep herd and it again began to grow. A count in 1965 located 577 sheep in the area. The bighorn ram hunts were continued and 31 were harvested annually. Fifty-four sheep of both sexes were transplanted from the Sun River over the five year period. A study of the sheep population demonstrated that lungworm infections existed in a high percentage of the herd.²⁷³ However, no mortality from this cause was observed in the sheep herd and this provided an object lesson in the value of keeping a sheep herd in balance with its range. The deer populations outgrew their food supply and teetered on the brink of disaster. The range was in very poor condition throughout the period in spite of the harvest of 7,215 mule and whitetailed deer. Fawn survival varied from fair to poor. The grizzly bear harvest was estimated at about six a year from the Sun River drainage.

On the public scene the intensive public information efforts, begun seven years before, were continued in 1962.²⁷⁴ ²⁷⁵ The year was relatively quiet and could be remembered as the year in which elk riding in rodeos was banned.²⁷⁶ A quota of 350 was pronounced but mild winds bathed the area and only 47 elk were killed.²⁷⁷

The Cascade County Wildlife group then succeeded in having one of their members appointed to the Fish and Game Commission. This rancher-farmer had killed his first elk in the Sun River at the age of 14²⁷⁸ and served on the big game committee of the Cascade County Wildlife Association during some of the most intense battles of the previous decade.²⁷⁹ His influence was soon seen when the quota for 1963 was set at 200 to satisfy the Great Falls wildlife group. Changes were also forced in checking station operations²⁸⁰ which ultimately were to raise the cost of checking some elk to \$200 each. The 1963 season closed with a kill of 122.²⁸¹ The Commissioner also had other ideas and proposed to transplant 200 elk into the Sun River. This brought an open clash between the Commissioner and Mr. Freeman, the Chief of Game Management.²⁸² The rest of the Fish and Game Commission sided with the professionals and blocked the transplants.²⁸³



The elk summer in the alpine grasslands and subalpine forests along the Continental Divide and other high ridges.
—(Photo by Harold Picton)

The intensive elk study in the Sun River continued with the trapping, neck banding, and blood testing of elk in January of 1964.²⁸⁴ This brought public charges of "harassing the elk all winter."²⁸⁵ The study furnished evidence that the Sun River hunting season should be split in order to harvest the elk from the Game Preserve and prevent overharvesting of those residing outside.²⁸⁶ Cooperative elk counts were rescheduled but the weather did not prove suitable and it led to a very low and inaccurate count²⁸⁷ of 1,289 which brought compliments for its "accuracy."⁸⁸⁸

The fall hunting quota was set at 140 but by November 18, 1964 only 35 elk had been checked out. An extension of the season was suggested but the Commissioner from Great Falls opposed.²⁸⁹ Petitions circulated opposing the reopening—especially in Augusta and Choteau.²⁹⁰ The controversial Commissioner was then censured by the remainder of the Fish and Game Commission for saying that the Department lied concerning a hen pheasant season.²⁹¹ The Cascade County Wildlife Association threatened court action to block the season²⁹² and then met with the Governor.²⁹³ A week later the Commission chairman announced that the season would not be reopened. The reason given was that the elk had not moved into the accessible foothills area.²⁹⁴

The new year of 1965 brought a legislative session and an unprecedented campaign in the "Letters to the Editors" columns. Partisans for both sides wrote in expressing their views. The letters opposing the Fish and Game Department were notable for their anti-intellectual content²⁹⁵ and for their attacks upon the biologically trained professionals. The professionals were accused of deliberately planning to "kill off all the elk"²⁹⁵ and named them the "Buggy Olegists."²⁹⁶ The professional management program did receive editorial support²⁹⁷ and the endorsement of the Montana Wildlife Federation and many other groups.^{298 299}

Another legislative investigation of the Fish and Game Department was launched on January 20, 1965.³⁰⁰ Hearings were held and on January 28, 1965 the Chairman of the House Fish and Game Committee endorsed the management program of the professionals.³⁰¹ The letters to the Editor campaign produced the impression that professional management was opposed by most citizens. The real situation was pointed out by the President of the Hill County Wildlife Association of Havre. He pointed out that only four of 60 clubs wanted our game managed by politicians and these were already represented by the "too much publicized commissioner from Great Falls".³⁰² In announcing the legislative endorsement of the Fish and Game Department program, the Chairman of the Senate Fish and Game Committee remarked that although the Cascade County Wildlife Association was critical of the management program, he had received many letters from Great Falls in support of the Department.³⁰³

Cooperative counts were now used as a formal operating procedure³⁰⁴ and the number of elk seen began to increase as the result of better counting weather.³⁰⁵ The Sun River had flooded severely in June of 1964. In 1965, a well organized effort revived the 1908 plan to build the perennially proposed dam near Sun Butte in the Sun River backcountry.³⁰⁶ The dam, now for flood control, faced opposition by sportsmen, the governor, the Fish and Game Department and the senior U.S. Senator from Montana.³⁰⁷

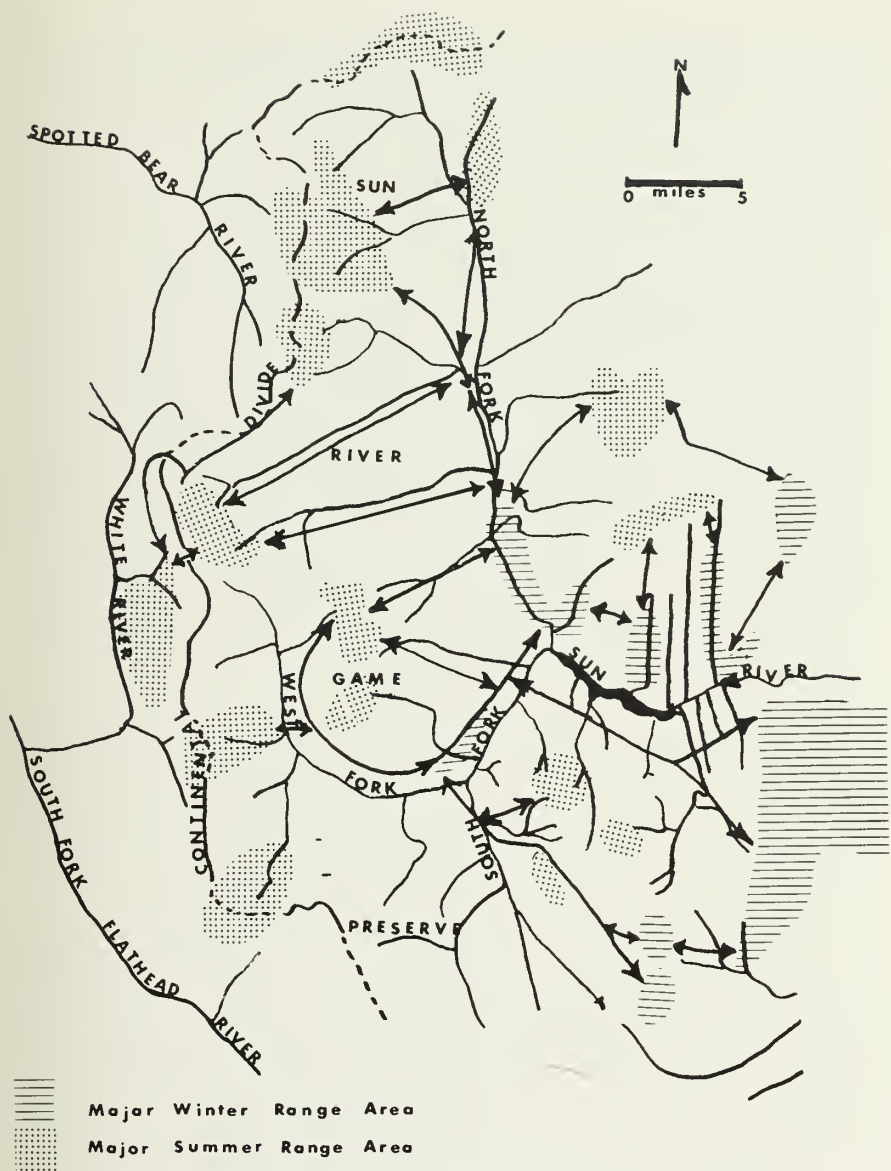


Figure 3. A map of the upper Sun River drainage showing the major elk summering and wintering areas and movement patterns as indicated by tagged elk.

The fall of 1965 found the backcountry ranges declining in condition. The professional game managers persisted in their efforts to try new types of hunting seasons specifically designed to harvest the Game Preserve segment of the elk herd. After several years of effort devoted to overcoming local opposition, a split season with a quota of 400 elk was instituted in 1965.³⁰⁸ In 1965, this season was coupled with special permits for late season hunts along the North Fork. Insufficient hunt-

ers used their permits to hunt, in this remote wilderness environment, to obtain the needed kill.³¹⁷ The split season allowed more hunting along the lightly harvested migration paths in the northern portion of the Sun River drainage than in the more heavily harvested southern part.

The flames of controversy again shot higher. But this time there was a difference, the governor had asked the Commissioner from Great Falls to resign.³⁰⁹ The Cascade County Wildlife Association, the Choteau Sportsmen Club and the Malmstrom Rod and Gun Club leapt to the defense of the commissioner.³¹⁰ The new Great Falls group, the Nature and Wildlife Society, opposed the commissioner.³¹¹ The commissioner refused to resign.³¹² This time the professionals received vocal support. It was pointed out, that for 3 years, the management recommendations of the Cascade County Wildlife Association for the Sun River had been followed and had not improved the elk hunting.³¹³ The Department also received editorial support from the newspapers of the area.^{314 315 316}

The five year period of controversy was again marked by a rapid turnover of the professional personnel at the focus of events. Rognrud and Eng put in second appearances on the Sun River scene. Lovaas, Knight, Foss, Rothweiler, Stone and later Martin also came, left their mark and went on to other assignments. Many things influenced the personnel turnover, but the controversy certainly did not encourage long residence.

A Myth That Won't Die—The Game Preserve

The calf crop, which had been reported at a very low 23 percent of the cow herd in 1966³⁰⁹ climbed to 28 percent of the cow herd by 1968.³¹⁸ The public ruckus in 1965 and 1966 was sufficient to force the Fish and Game Department to expend considerable sums of money on transporting unskilled sportsmen representatives on cooperative aerial elk counts and to again run checking stations which got so little business that it cost over \$200 to the Fish and Game Department to check an elk.³¹⁹

The increase in the bighorn sheep population had brought it into competition with the reduced elk herd by 1965.³²⁰ The bighorn ram hunts were continued and 159 sheep of both sexes were trapped for transplanting into other areas during these years.³²¹ Three way competition between elk, deer and sheep for winter range was reported.³²² The lamb crop of the sheep herd was rated poor in both 1966 and 1967.³²³ The grizzly harvest estimates remained about the same as the early 1960's. The deer herds again endured very poor winter ranges and had poor fawn crops as a result.³²⁴

As 1966 wore on, constant pressure was applied to increase the size of the elk herd with the majority of the Fish and Game Commission voting against the Commissioner from Great Falls.^{325 326} Letters to the Editors poured in and once again were as often directed as much against trained individuals as against the actual management policies.^{327 328} The controversial Commissioner was not reappointed to the Fish and Game Commission and immediately resigned.³²⁹

Discussion of the upper Sun River dam (called Castle Reef at this time) was revived after a lull.^{330 331} The dam building effort again fell short and a dike system for Great Falls was proposed.

In 1968 a rumor of the abolition of the Sun River Game Range circulated showing the confusion of names which has since plagued efforts to understand and



Much, but not all, of the Sun River elk herd winters on mountain front grasslands swept by the warm chinook winds.
—(Photo by Harold Picton)

explain the situation.³³² A bill abolishing the Preserve was introduced in the 1969 Legislature;³³³ it was opposed by the Cascade County Wildlife Association; was given a “do pass” recommendation of the Senate Committee³³⁴ and was voted down.³³⁵

The controversies swirled into 1970 against the backdrop of conflict between the Governor and the Director of the Fish and Game Department which concerned Montanans through 1971. The discussion centering on elimination of the Game Preserve often presented its abolition as a first step toward abolishing the Bob Marshall Wilderness Area.^{336 337 338} The Game Preserve discussion was embellished by complaints about other aspects of wildlife management and requests for the firing of Fish and Game technical personnel working in the Sun River.^{339 340} The Commission voted unanimously to maintain the elk herd at 2,200 animals and to encourage the bighorn sheep population.³⁴¹

Some modifications of the elk situation occurred in the late 1960's. Following the flood of 1964, the Beaver Creek and Sun River canyon road system was improved producing an intensified “firing line” hunting situation, a point which was driven home by the overharvest of the 1970 hunting season. Beginning in 1967, only cows and calves were included in the elk harvest quotas. Additional modified hunting seasons were tried in order to harvest elk lingering in the Game Preserve. The problem caused by these elk deepened the overuse of vegetation in the Preserve, giving a forecast of trouble ahead.³⁴² The wintering area of the herd again appeared to be in flux with increased numbers of elk using private land next to the Sun River Game Range.³⁴³

The fall of 1970 produced an intense argument over the cow-calf quota between the Cascade County Wildlife Association and the Department.^{344 345} The

problem was settled by a sudden snowfall which produced a kill of 92 cows and calves above the quota of 325.^{346 347} The 48 hours needed to close the season proved to be too long, this time. The firing line harvest stimulated the Director of the Fish and Game Department to point out the desirability of abolishing the Game Preserve.³⁴⁸

The accumulation of information concerning the Sun River Game Preserve and the results of the intensified studies of the bighorn sheep, begun in 1965, resulted in several conclusions from the game managers. Either-sex bighorn sheep seasons were proposed to the Commission in the early 1970's. The second conclusion was to propose the abolition of the Sun River Game Preserve. Areas on the slopes around the West Fork licks which had been covered by a good mixture of grasses and forbs in the late 50's had become nearly solid stands of dandelions by the 70's. Over 90 percent of the forage was used on wintering area transects inside the Game Preserve and under 70 percent outside. Overuse of summer range was also appearing.⁹³ To the perceptive sightseer, familiar with quality wildlife habitat, the esthetics of the views in many parts of the Preserve had been degraded by the obvious overuse. Certainly the esthetics of big game hunting had been distorted by the "firing lines".^{349 350}



These photos taken from Circle Creek looking northwest depict the closure of the coniferous canopy along the North Fork of the Sun River. Also note the abundant aspen in the foreground of the upper photo. The top photo was taken in 1929, bottom photo in 1966.

—(U.S.F.S. photo)

In September of 1972, the Fish and Game Commission followed the logic of the biological facts and made a formal proposal to abolish the Game Preserve.³⁵¹ This official action was the first time in the 60 year history of the Preserve that such a formal proposal had been made by the responsible governmental agency.

The sidewalk superintendents then carried out their legitimate function in our democracy by forcing thorough public justification of the request.^{93 352 353 354} A bill to abolish the Game Preserve for a two year trial period was introduced into the Montana Senate.³⁵⁵ This Game Preserve suspension bill was preceded by the introduction of a resolution lauding the creation of the Preserve.³⁵⁶ Unfortunately the public discussion of the Game Preserve showed the confusion, inaccuracies and bitterness which has come to characterize the public side of wildlife management in the Sun River.^{353 357 359 360} On February 13, 1973 the Senate Fish and Game Committee tabled the Sun River Game Preserve bill with a tie vote.³⁶¹

The Game Preserve issue was revived in the 1974 Legislature when the Senate Fish and Game Committee recommended that the Preserve be suspended for three years.³⁶² The full Senate then passed the bill on its initial readings³⁶³ but then killed it on the third reading.³⁶⁴ The next day the Senate again reversed field and passed the bill on to the House of Representatives.³⁶⁵ This action once again brought out the emotions and the Letters to the Editors again flowed freely.³⁶⁶ Opposition organizations mobilized against the bill.^{367 368} The Fish and Game Department was accused of lobbying and of the horsetrading of votes on other bills to secure the passage of the Preserve bill.³⁶⁹ Committee hearings were delayed and the Legislature began to draw to its close. Proponents of the bill began to fear that it would die unsung in committee. Finally hearings were held. The Chairman of the House Fish and Game Committee, a representative from Cascade County, testified against the bill before his own committee.^{370 371} On March 8, 1974 the House Committee recommended "do not pass" by an 8 to 7 vote. Amendment of the bill, by another representative from the Sun River area, was attempted but failed. The House of Representatives then killed the bill with a 54 to 33 vote.³⁷² This was followed by an announcement from the Director of the Fish and Game Department that the Department would make no attempt in the 1975 Legislature to open the Preserve.

The legend of the Sun River Game Preserve lives on. In 1915, Mr. Spaulding attempted to slay the creature with facts. Today the names are different: Thoreson, Mitchell, Bucsis; Feist, Goodman, McCarthy; but the struggle of reason and mythology is the same.

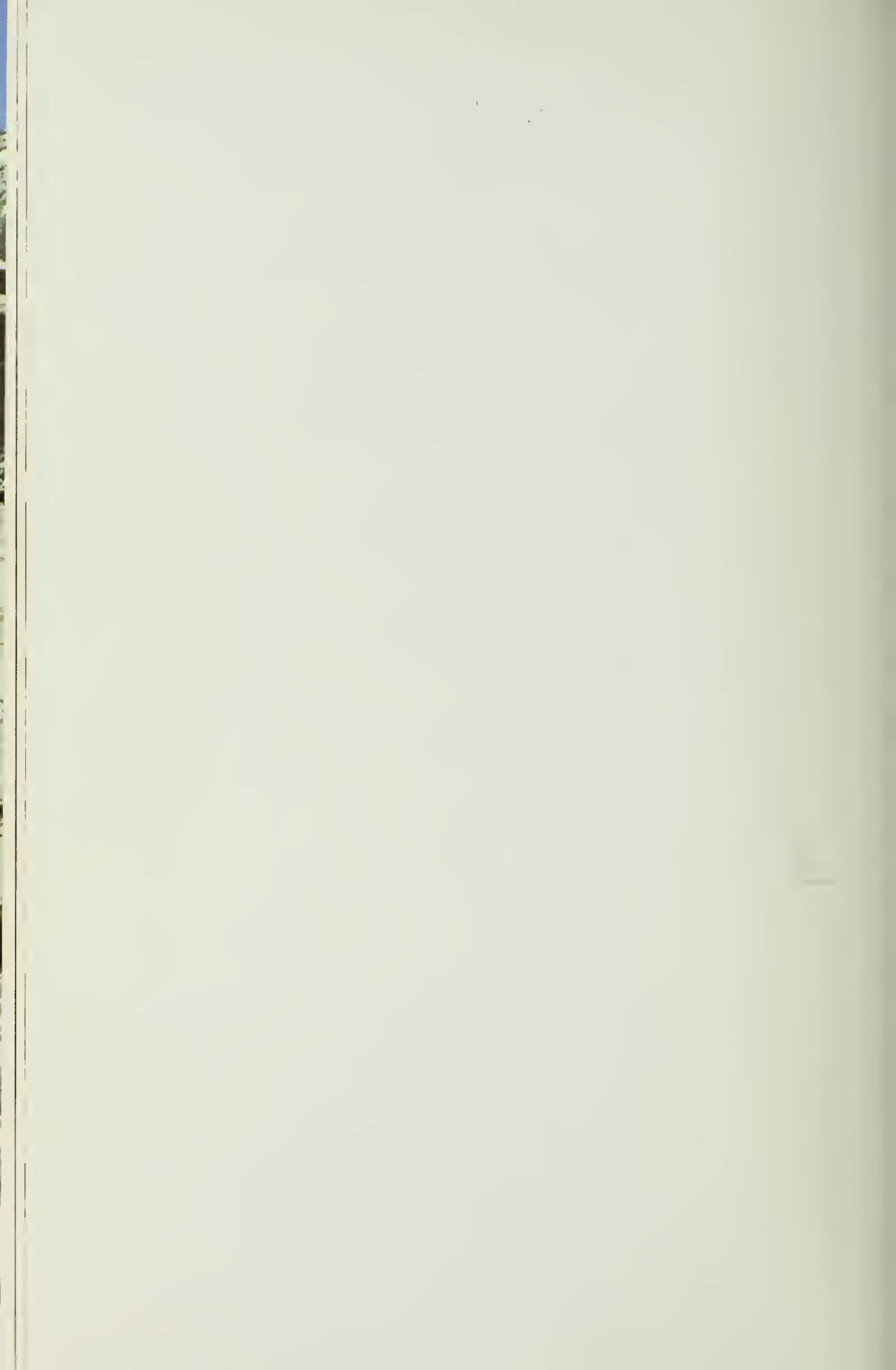


MODERN END OF HISTORY

The history of the Sun River is not yet complete, nor will it be as long as there are men to write about it. Heraclitus of ancient Greece spoke of life as being a river, for you cannot step twice in the same stream since new waters are forever flowing down upon you. Such it is, with the life of the Sun River. The fires of the Sun River battles forged the leadership of the Game Management Division of the Montana Fish and Game Department for its first quarter century. The present game management program of the Sun River represents the three generations of sportsmen, cattlemen, foresters and wildlife biologists who worked to build it. If a single individual were to try to take credit for this program, it would blaspheme all those good men who stood when it was time to be counted.

In this review we have seen the working of ecological processes even now only partially understood. We have seen the management of wildlife by legislative decree tried and fail. We have seen living things going about their own ways, following their own rules, ignoring the pronouncements made by politicians. We have seen men driven by emotional certainty follow many diverse paths all of which were paved with good intentions. We have talked of other men, their emotions tempered by reason, attempting to follow the thread of knowledge so as to harness the forces of life for the enjoyment and betterment of us all. We have seen hard earned facts released from dusty volumes of reports used to improve the visual esthetics, the wildlife food supply, the stability of recreation and the welfare of rare animal species. And last, we have seen how the people of a great democracy go about accepting reason over prejudice to protect and improve our way of life.

The saga of the sun is a poem written by life. The poetry of life is not just limited to the Now, but extends back into the past and we must see that it extends into the future.



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